

What is Claimed is:

1. A coated substrate comprising
a substrate;
a bond coat on said substrate comprised of a high temperature MCrAlY coating of a thickness of from 0.003 inches to 0.015 inches; and
an abradable top coat on said bond coat comprised of high temperature yttria stabilized zirconia of a thickness of from 0.015 inches to 0.080 inches.
2. A coated substrate as set forth in claim 1 wherein said top coat includes a polyester in an amount of 3% to 9 % by weight.
3. A coated substrate as set forth in claim 1 wherein said top coat includes a polyester in an amount of 4% to 6 % by weight.
4. A coated substrate as set forth in claim 1 wherein said top coat has a thickness of from 0.025 inches to 0.060 inches.
5. A coated substrate as set forth in claim 1 wherein said bond coat is comprised of NiCoCrAlY.
6. A coated substrate as set forth in claim 1 wherein said bond coat contains a reactive element selected from the group consisting of hafnium and silicon.
7. A coated substrate wherein said substrate is an inner shroud cover plate.
8. A high temperature clearance coating comprising
a bond coat comprised of a high temperature MCrAlY coating of a thickness of from 0.003 inches to 0.015 inches; and
an abradable top coat on said bond coat comprised of high temperature yttria stabilized zirconia of a thickness of from 0.015 inches to 0.080 inches.

9. A coating as set forth in claim 8 wherein said top coat includes a polyester in an amount of 3% to 9 % by weight.
10. A coating as set forth in claim 8 wherein said top coat includes a polyester in an amount of 4% to 6 % by weight.
11. A coating as set forth in claim 8 wherein said top coat has a thickness of from 0.025 inches to 0.060 inches.
12. A coating as set forth in claim 8 wherein said bond coat is comprised of NiCoCrAlY.
13. A coating as set forth in claim 8 wherein said bond coat contains a reactive element selected from the group consisting of hafnium and silicon.
14. A process of applying a thermal coating on a substrate comprising the steps of
spraying a high temperature MCrAlY powder onto the substrate to form a bond coat of a thickness of from 0.003 inches to 0.015 inches; and
spraying a high temperature yttria stabilized zirconia onto said bond coat to form an abradable top layer of a thickness of from 0.012 inches to 0.080 inches.

#201905